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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,968	08/21/2003	Gregor Buedding	740116-487	7577
22204	7590	11/30/2004	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			BOSWELL, CHRISTOPHER J	
			ART UNIT	PAPER NUMBER
			3676	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,968

Applicant(s)

BUEDDING ET AL.

Examiner

Christopher Boswell

Art Unit

3676

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/21/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,765,884 to Armbruster.

Armbruster discloses a motor vehicle lock having a latch (3) which includes a pre-catch (the surface before element 4) and a main catch (4) and is pivotable around a first axis (2A) into an open position, into a pre-catch position and into a main catch position, a ratchet (5) which is pivotable around a second axis (6A) into an open position, into a pre-catch position and into a main catch position, and an actuating element (53) which includes an actuator element having an engagement element (27) located thereon, wherein the latch is engaged with the pre-catch or the main catch when the ratchet is located in the pre-catch position or in the main catch position, wherein the latch is kept in the pre-catch position or the main catch position until movement of the actuator element out of an initial position in a first direction such that the ratchet is raised by the actuating element resulting in an opening assistance function (column 4, lines 41-56), wherein the latch is movable from the pre-catch position into the main catch position by actuating the actuator element out of the initial position in a second direction opposite the first

direction which couples the actuating element to the latch resulting in a closing assistance function (column 4, lines 41-56), and wherein coupling for the closing assistance function is effected by a step-down gear (54) interposed between the actuating element and the latch, as in claim 1.

Armbruster also discloses the actuating element being rotatable about a third axis (figure 1) which is spaced apart from and aligned essentially parallel to said first axis, and wherein the engagement element provides a coupling (8) to the ratchet during movement in the first direction and to the latch during movement in the second direction, as in claim 2, wherein the actuating element is a worm wheel (1) is rotatable around the third axis and the engagement element is a coupling journal located on an end face of the worm wheel and extends parallel to the third axis (figure 1), as in claim 3, as well as the step-down gear between the actuating element and the latch is an essentially disk-shaped transmission element (54) which is pivotable around a fourth axis (56) and includes a first actuating surface and a second actuating surface (column 5, lines 28-45), wherein the transmission element, via the first actuating surface, engages the engagement element of the actuating element during movement of the actuating element in the second direction which causes, via the second actuating surface, forced engagement of the latch for coupling of the actuating element to the latch (figure 1), as in claims 4 and 5, and where the step-down gear includes several stages (column 5, lines 31-37), as in claim 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armbruster, in view of U.S. Patent Number 6,022,056 to Cope et al.

Armbruster discloses the invention substantially as claimed in claims 7 and 22.

Armbruster discloses a motor vehicle lock having a latch (3) which includes a pre-catch (the surface before element 4) and a main catch (4) and is pivotable around a first axis (2A) into an open position, into a pre-catch position and into a main catch position, a ratchet (5) which is pivotable around a second axis (6A) into an open position, into a pre-catch position and into a main catch position, an actuating element (1 and 53), a Hall sensor (37) and a control (35) for determining the position of the door latch from the sensor signals generated by the Hall sensors. However, Armbruster does not disclose a plurality of Hall sensors. Cope teaches of a door latch apparatus with a pair of Hall effect sensors (130 and 132) in the analogous art of door latch mechanisms with Hall effect sensors being utilized to monitor the positions of the components of the door latch mechanism for the purpose of generating a signal produced by the Hall effect devices to indicate a position of a dead latch plunger (column 10, lines 34-43) and to monitor the position of a door latch actuator and also to initiate a rotary cycle of a crank arm, which drives a dead bolt latch, when a trigger signal from a trigger element is generated to unsecure a door

(column 10, lines 53-58). It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate more Hall sensors to monitor the positions of both the ratchet and the actuating element in order to indicate the position of the ratchet and to monitor the position of the ratchet and also to initiate the operating movement of the actuating element, which drives the ratchet, when a trigger signal from a trigger element is generated to release the vehicle door. Wherein, the location of the parts of an invention only involves only routine skill in the art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to door latch assemblies that utilize Hall effect sensors to determine positions of the components, therein:

U.S. Patent Number 6,641,184 to Ercies et al., U.S. Patent Number 6,568,720 to Szablewski, U.S. Patent Number 6,459,223 to Mauel et al., U.S. Patent Number 6,437,532 to Koerwer, U.S. Patent Number 6,400,278 Weyerstall et al., U.S. Patent Number 6,278,252 to Kachouh, U.S. Patent Number 5,309,745 to Ursel et al.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (703) 305-4067. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CJB 
November 24, 2004

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600